Abstract of the Disclosure

The device and method of the present invention employs a column having a gas inlet in its lower part and a gas outlet in its upper part. Carbon particles are introduced into the column through a supply pipe. The supply pipe is movable so that by manipulating the height of the supply pipe in conjunction with discharging particulate matter through the column, the height of the bed of particulate matter in the column can be adjusted so that the retention time of the off gas in the particulate bed is constant. By maintaining a constant retention time of the off gas in the bed, complete conversion of the off gas is achieved.